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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,999

06/29/2006

Koichi Takaku

060427

3944

23850 7590 10/14/2009  
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EXAMINER

RESTIFO, JEFFREY J

ART UNIT

PAPER NUMBER

3618

MAIL DATE

DELIVERY MODE

10/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,999	<b>Applicant(s)</b> TAKAKU ET AL.	
	<b>Examiner</b> Jeffrey J. Restifo	<b>Art Unit</b> 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guidry et al. (US 7,108,091 B2).

Guidry et al. discloses a fuel cell vehicle comprising hydrogen tanks (or gas containers) 25 behind fuel cell stack (or engine) 30 in fuel cell box (not numbered) with ventilation 34 which flows from the rear of the fuel cell box towards the tanks and a release pipe (not numbered) with release outlet 46 between said tanks, all of which is under floor 14 and between mainframes 7 on sub-frame 26, as shown in figure 14 and recited in col. 7, lines 1-20. Guidry does not disclose the release outlet between the tanks and fuel cell stack. Guidry et al. does disclose the fuel cell stack on either side of the hydrogen tanks, as shown in figures 14 and 21. It would have been obvious to one having ordinary skill in the art at the time of the invention to have provided the fuel cell stack on the other side of the hydrogen tanks, as shown by Guidry et al. in figure 21, in order to increase the space towards the front of the vehicle, which in turn would result in the release outlet being between the tanks and fuel cell stack.

With respect to claim 4, Guidry et al. does not disclose the motor as being an engine. Simply exchanging the electric motor for an engine is not viewed as patentable

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unless it produces an unexpected result and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have substituted the motor of Guidry et al. with an engine in order to provide non-electric power to the vehicle.

With respect to claims 3 and 5, the location of the release outlet is not shown in figure 15, however the claim does not specify which center line of the tanks, lateral, longitudinal, etc., and simply shifting the location of the outlet is not viewed as patentable unless it produces an unexpected result and therefore It would have been obvious to one having ordinary skill in the art at the time of the invention to have located the release outlet above, below, or anywhere relative to a center line of the tanks in order to release hydrogen in a desired location or direction.

### ***Response to Arguments***

3. Applicant's arguments filed 6/16/09 have been fully considered but they are not persuasive. With respect to the applicant's arguments concerning claims 1 and 4, Guidry et al. does appear to disclose a sub-frame 26 between the left and right mainframes, further the term "in a vicinity" is not limiting because it can be considered subjective.

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Restifo whose telephone number is (571) 272-6697. The examiner can normally be reached on Monday-Thursday 10am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey J Restifo  
Primary Examiner  
Art Unit 3618

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Primary Examiner, Art Unit 3618